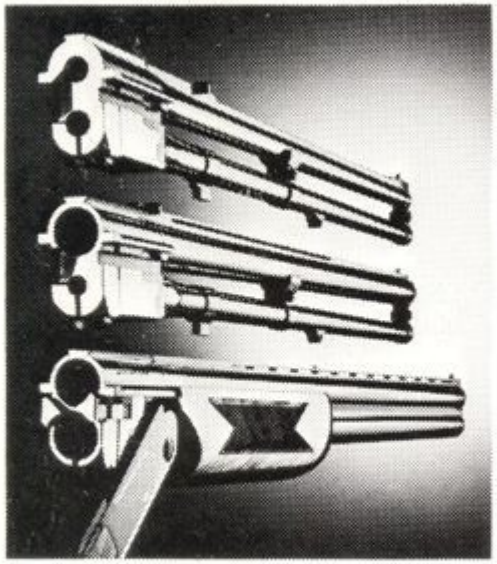
VALMET 412 Series

Owner's Instruction Booklet for the Shooting System



- WARNING -

You must read this booklet before assembly or operation of this gun. Caution must be taken in several areas because personal serious injury or damage to this gun is possible if procedures detailed herein are not followed.

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HANDLING

1. Always check the chambers to be certain they are empty. Always handle your gun as if it were loaded. Do not point the barrels at another person. Do not try fire any gun as it may harm the firing mechanism. Keep your thumb-operated safety in the safe position except when ready to fire your gun.

2. Always check the barrels before firing to make sure they are free from obstruction. Even a small obstruction may ruin your barrels. If barrels and chambers are coated with protective oil, run a clean swab or patch through the barrel to remove excess oil before shooting.

3. Be sure that you are using the same gauge or caliber cartridges that your gun is designed to fire. Be particularly careful with .12 and .20 gauge loads since they appear to be the same size. Do not mix shotgun shells of different gauges. This will only increase the changes of even the most careful shooter misloading and damaging the gun. The same precaution applies to Rifle cartridges as well.

4. Load the gun only in hunting and target shooting environments. Remove shells when you leave that area. Do not drive with a loaded gun.

5. Always be aware of the background before you shoot. Be especially careful of a ricochet when shooting across or at a target in water. Be very careful when shooting near rocks and other hard objects because of ricocheting shot or bullets.

6. The gauge and chamber length are stamped on the rear left-hand side of the barrels. In this same area you will find the choke and pressure obtained by high-pressure test on shotguns. Both 2-3/4" and 3" loads may be used only if the barrels are stamed 3" chambers. Barrels stamed 2-3/4" cannot use a 3" or "Magnum Load".

ASSEMBLY

1. Carefully read this booklet until you are thoroughly familiar with your new Valmet and prior to any attempt at assembly. Failure to do so could result in damage to the gun. Numbers in brackets coincide with Parts List on Page 18.

2. Check the chambers to be sure they are empty.

3. Check the bore of each barrel to be sure that it is clear and use a dry clean patch to remove any oil or lubricant.

4. Remove the barrels and forend assembly from the packing box as a unit. Place this units in your lap, muzzle to the left. Now use your right forefinger to lift the spring loaded forend snap assembly [57] upward until it stops. Maintain pressure. With your left hand lift the FRONT END of the forend wood upward and in an arc toward the chamber end of the barrels. This frees the forend component from the barrel component. This is a close fit and care should always be taken when attaching or removing the forend component.

5. With the receiver in your right hand, push the top snap [2] to the right side until it locks. When moved to the right, the top snap will also move the locking bolt [1] rearward to the locked position, and also, the automatic safety button [6] to the rear to the safe position. No attempt should ever be made to assemble the barrels to the receiver until this step is taken.

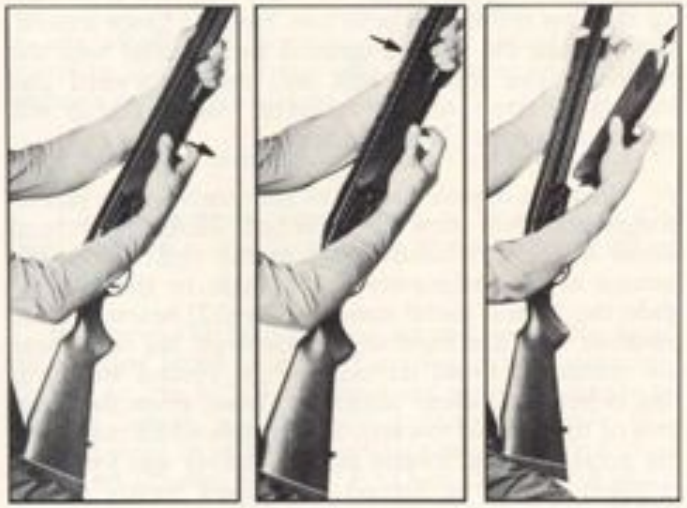
6. To assemble the barrel component to the receiver component, hold the stock in the right hand, as shown in the photo. Hold the barrels in the left hand with the muzzle down at about a 45° angle. Pull downward and forward at this angle to mate the two pilot pins ad the top small pins with the barrels. Once mated, simply push the barrels upward and parallel with the receiver. The locking bolt will move forward and lock the barrels to the receiver, the top snap will move to its center lock position.

7. With the barrels locked to the receiver, the forend component may now be attached. Hold the forend wood in the left hand, stock in the right. With the forend at approximately a 45° angle to the barrels, slide the forend metal components [52] rearward into position with the front of the receiver. Be sure these are mated to avoid damage to the forend wood, as this is held to a close tolerance. Now, pivot the front end of the forend towards the barrels while maintaining pressure. The forend snap assembly will lock into position when the forend is pressed tightly to the barrels.

8. The gun is now assembled. To open the action simply push the top snap to the side with your thumb while exerting downward pressure on the barrels.

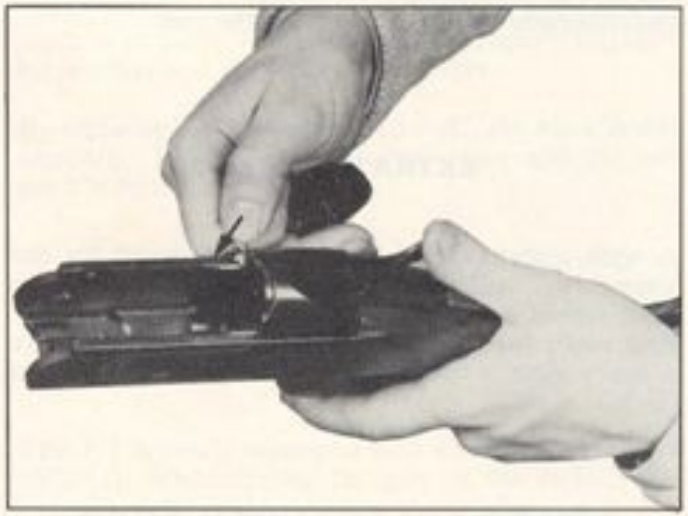
DISASSEMBLY

1. Check the chambers. If there are shells in either of the barrels remove them. You are now ready to disassemble the gun. Securely rest the gun's butt against your upper leg, grasp the barrels above the forearm with your left hand. Place your right hand on the forearm so that you can open the forearm release with your fingers. When the release is open slowly pivot the forearm downward with the help of your left hand.



NOTE: Do not pivot forearm with undue force. This could damage the cocking lever or mar the forearm wood.

2. If you keep your gun disassembled for a long period of time, uncock the locking plate and fire the cocked barrels as follows: Press on the top tang with your thumb which will shift the locking shield slightly rearward. Press down on the top slide trip located below the right side of the locking shield with a screwdriver or with corresponding tool. This will allow the locking shield to slide forward.



Push the automatic safety forward to its "fire" position and pull the trigger.

CLEANING

Proper cleaning of any fine gun lengthens its effective life and assures trouble-free service. We recommend that only high quality components be used in maintenance. Your Valmet dealer will be pleased to assist you in this selection. It is advisable to clean the gun after use and leave all surfaces with a light coat of protective gun oil prior to returning it to the case. In humid or salt atmosphere, a heavier type of protective gun oil will be necessary. Remember to clean all bores and chambers of oil prior to firing the gun.

EXTRA BARRELS

A wide assortment of barrels are produced for the Valmet 412 models. Your Valmet dealer has the most recent list available and will be able to place your order for you. He can also advise approximate delivery time if the does not have your choice in stock.

ASSEMBLY OF ADDITIONAL STOCK

In the Valmet 412 Series, the stock [60] is attached with one main screw [62] to the action, so you find it very easy to change the stock.

Remove first butt plate [66] by opening two screws [70]. As to rubber butt plate the screws are located in a place not visible, but with a narrow screw driver you easily find the heads. After having removed the butt plate you then open the main screw with a long screw driver, unscrewing 3–4 times with the result that the action will be feed from the stock about 1–3 mm. You then loosen the screw and remove the stock.

If you change the old stock for a brand new one check fitting surfaces on the front of the stock and press the stock in its place. If the stock is not properly engaged, hit receiver and stock slightly together.

By screwing the main screw up tight, the stock is now attached. Then engage the butt plate and the new stock is fit for use.

LOCKING BOLT

The 412 Series is equipped with a sturdy locking bolt slide [1]. When closing the gun let the locking bolt snap forward under its own force. Do not aid or retard this movement because if the action does not close by itself there may be debris, sand or other small objects between the action and the barrels. If so, open the gun, remove the shells, and clean the receiver and barrel surfaces. Keep the polished breech bolt area and lightly oiled.

CHOKE MARKINGS

The following choke symbols are used on Valmet shotguns:

F	Full Choke
IM	Improved Modified
M	Modified
IC	Improved Cylinder
C	Cylinder

These symbols, as well as the serial number and testing stamps, will be found on the rear, left side of the barrels. The serial number is also stamped on the bottom of the receiver.

LOADING AND FIRING

1. Open your gun by moving the top tang [2] to the right. This will slide the locking bolt [1] back. Then by placing the pistol grip against your body, you can open the gun.

2. When the breach is opened, the safety [6] simultaneously moves to the safe position. Check the barrels into each chamber (or the single chamber which you wish to fire), and close the action. NOTE: When the action is closed, keep the barrels pointing at the ground or in a safe direction. Do not point the gun at another person at any time.

3. Note that the left side of the trigger has an arrow pointing upwards. To fire the upper/top barrel, simply press the selector button [36] IN. Note that the right side of the trigger has an arrow pointing down. To fire the bottom barrel first, simply press the selector button IN.

Remember that you press the selector button IN to choose which barrel fires **first.** By pulling the trigger [35] a second time, the other barrel will fire. NOTE: The finger must free the trigger between shots and be pulled again to fire the second barrel. The major advantage to this type of firing mechanism is that it is not recoil-operated. The second barrel will fire even if the first barrel is empty or misfired.

COCKING INDICATORS

To the rear of the safety slide are two plated pins. These are the cocking indicators [9]. When the action is cocked, both pins will protrude above the surface. When a barrel is fired, the appropriate pin drops below the surface. The letter "U" just behind the left pin is the UNDER barrel indicator; the letter "O" indicates the OVER barrel and is the right side pin.

This is a unique and useful feature of the Valmet. It is also a useful safety feature, since it informs the user if the action has been fired or is cocked and ready to fire.

SIGHTING IN OF DOUBLE RIFLE

1. General:

Facts to be considered:

- always shoot double shot, lower barrel first.

- several, fast, repeated shots increase the temperature of the gun quickly, which makes sighting in of the rifle more difficult, to some extent.
- always tighten the regulating screw quite tight, before sighting in the rifle.
- when using a scope on your double rifle, you may have to adjust the point of impact of both barrels.
- if you want to use different loads and bullets, you must change the adjustment between the barrels.

2. Dry the barrels of oil with care, as well as the cartridge chamber.

3. Load both barrels and first shoot the lower barrel. Check the point of impact and shoot the upper barrel without opening the gun, between the shots. Check the point of impact.

4. The points of impact are adjusted by sliding the connecting ring located at the middle of lower barrel.
A. If the barrels shoot too much crosswide, (upper barrel down and lower barrel up) adjustment is made by the connecting ring. Slide it so as the barrels become closer to each other.

If both barrels are shooting correctly with respect to one another, ie. if the lower barrel is shooting lower and the upper barrel, higher, yet the distance between the respective points of impact is too great, the connecting ring is adjusted so as to increase the gap between the barrels. Adjustment of the connecting ring cannot be predetermined. The adjustment marking was factory set for a distance of 100 meters, resulting in a group of less than 100 mm with the type of bullet specified in the guarantee card.

Horizontal adjustment of the points of impact is done by turning the screws B at the muzzle of the barrel set. If, for example, the lower barrel shoots left from the target point, the adjustment crews are opened and the adjustment screw is turned so as to move the lower barrel to the right with respect to the target line. The adjustment marking at the muzzle of the gun was factory set for a distance of 100 meters with a group of less than 50 mm.

5. The point of impact of the gun is removed sideways to the target point, by sliding the sight plate into the required direction.

Height is adjusted by filing down the sight bead or changing the height of the sight beads.

SIGHTING IN OF SHOTGUN RIFLE

1. Dry the rifle very carefully of oil, as well as the cartridge chamber.

2. Shoot the rifle sighting in shot at the distance you wish. Check the point of impact.

3. In the vertical position, the point of impact is changed to the target point, by sliding the connecting ring. For example, if the aim must be higher, slide the connecting ring so the rifle goes further away from the shot barrel.

4. In order to preserve the point of impact of the shot barrel, avoid big changes in the sight bead's height and sideways turning of the sight plate.

5. When you want to use a scope or an equivalent device the barrel adjustment don't need to be changed.

DOUBLE TRIGGER ASSEMBLY

Any Valmet O/U configuration can be equipped with this double trigger mechanism.

A gunsmith may change your gun from a single to a double trigger or reverse. For example, when a single trigger assembly is being changed to a double, you only need to add the following components: two triggers and a trigger spring [67, 68, 69].

For the under barrel there is an adjustment screw [100] on the rear trigger to adjust the pull length. This screw also adjust the ratio of pull to re-characteristics. When the screw is turned tighter (clockwise), the pull will be lengthened and the

corresponding release shortened. The reverse is true when the adjustment screw is loosened (counter-clockwise). The trigger assembly and firing mechanism in your Valmet gun are factory preset, but may be slightly adjusted to better suit your particular shooting needs.

INSTALLATION OF SCOPES

On combination shotgun/rifle and double rifle there is a grove for the stop pin in the middle of the 1/2" base especially for the Valmet scope mount. The proper installation of even heavy scopes can be assured when using this groove and this unique mount design which incorporates the "three point principle". Once you have your scope zeroed in, you may never have to adjust it again because this design means that you can remove the scope for transportation or cleaning and return it to exactly the same position. Valmet recoil-reduced scope mounts are available for 1" scopes.

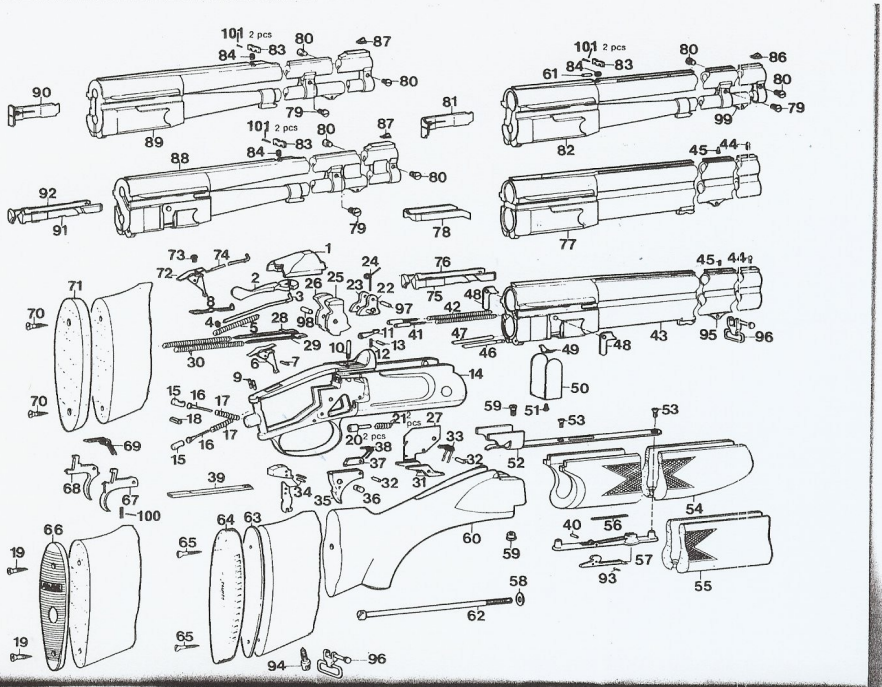
SERVICE AND REPAIR

If your Valmet gun should require service or repair, we suggest you contact your authorized Valmet dealer.

FINAL WARNING

Use factory made ammunition only for maximum safety as well as proper cleaning maintenance at all times.

Failure to do so could result in future alteration of the receiver specifications, which would prevent you from taking full advantange of Valmet's barrel interchangeability.



Part no.	Part name
1 212230	Locking Bolt
2 202770	Top Snap
3 202790	Top Snap Plunger
202791	Top Snap Plunger Skeet, Trap
4 202800	Top Snap Plunger Washer
5 202810	Top Snap Spring
6 202820	Safety Button
7 206100	Safety Pin
8 202830	Safety Spring
9 202840	Indicator
10 202780	Top Snap Pin
11 201090	Top Slide Trip
12 201101	Top Slide Trip Spring
13 202100	Top Slide Trip Pin
14 212180	Frame, assembly Ø 2.0
212181	Frame, assembly Ø 1.6
15 202850	Striker
16 201140	Firing Pin
210370	Firing Pin
17 201150	Firing Pin Spring
201151	Firing Pin Spring
18 JE 9201	Striker Pin
19 204420	Screw
20 204591	Ejector Operating Pin
21 251850	Ejector Operating Pin Spring
22 204671	Cocking Crank Right
23 204672	Cocking Crank Left
24 204520	Cocking Slide Spride
25 202862	Hammer Right
26 202863	Hammer Left
27 202900	Support Plate
28 200933	Mainspring Plunger Left
29 200932	Mainspring Plunger Right
30 202870	Mainspring
31 202882	Sear
32 206120	Trigger Pin
33 202890	Sear Spring
34 200940	Inertia Block
35 202910	Trigger

Part no.	Part name
36 202940	Selector Button
37 202920	Selector Cam
38 202930	Selector Cam Spring
39 208620	Cocking Slide
40 JE 1530	Striker Pin
41 204550	Ejector Spring Plunger
42 204560	Ejector Spring
43 208800	Barrels complete 12-28" M/F
209090	Barrels complete 12-26" C/IC
208770	Barrels complete 12-28" C/C Skeet
209010	Barrels complete 12-26" IC/M
208690	Barrels complete 12-30" IM/F Trap
208990	Barrels complete 12-30" M/F 3" cartridge chamber
209240	Barrels complete 20-26" C/IC
209210	Barrels complete 20-26" IC/M
209250	Barrels complete 20-28" M/F
44 201810	Front Sight Bead
45 201840	Rear Sight Bead
46 204580	Ejector Operating Rod Right
47 204600	Ejector Operating Rod Left
48 204630	Ejector Trip
49 204610	Ejector Trip Spring
50 204621	Covering Plate
51 206090	Covering Plate Screw
52 208580	Fore-end Iron
53 HE 4472	Fore-end Screw
54 208570	Fore-end Wood
55 212460	Fore-end Wood (model Vainio)
56 201710	Fore-end Snap Spring
57 207580	Fore-end Snap assembly
58 JD 0107	Stock Bolt Washer
59 208610	Fore-end Nut-Bolt
60 205450	Stock (Monte-Carlo)
209030	Stock (Standard)
208400	Stock (Trap)
209020	Stock (Skeet)
61 212130	Snap Pin
62 209280	Screw
63 201820	Butt Plate Spacer
64 201850	Butt Plate

Part no.	Part name
68 204690	Front Trigger
69 208120	Trigger Spring
70 HP 0903	Screw
71 202370	Butt Plate, Curled Eirch Wood
72 202821	Safety Button
73 HC 0226	Screw
74 202791	Safety Spring
75 208810	Extractor Right
76 208820	Extractor Left
77 208510	Barrels complete 28" M/F
208680	Barrels complete 30" M/F 3" cartridge chamber
78 208540	Extractor
79 212940	Screw
80 211820	Screw
81 212240	Extractor
82 213020	Barrels complete cal. 12 IC/7×65R
213030	Barrels complete cal. 12 IC/.30-06
213040	Barrels complete cal. 12 IC/9.3×74
83 212900	Sight Plate
84 211320	Spring
85 211330	Crank Pin
86 213090	Sight Bead
87 212960	Sight Bead
88 213070	Barrels complete 2×(7×65R)E
213080	Barrels complete 2×(9.3×74R)E
89 213050	Barrels complete 2×.308
213060	Barrels complete 2×.30-06
90 211980	Extractor
91 208810	Extractor, Right
92 208820	Extractor, Left
93 JE 9005	Spring Pin
94 208440	Rear Swivel Bow Body
95 208450	Front Swivel Bow Body
96 208430	Swivel Bow
97 206110	Cocking Crank Pin
98 206130	Hammer Pin
99 213120	Front Swivel Bow Body
100 213290	Trigger Adjusting Screw
101 213280	Trigger Adjusting Screw

SAKO-VALMET

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